

Climate Leadership Plan

Data Analysis

Interpreting the Data

Spending by Location

The attached data shows spending under the Climate Leadership Plan (CLP) broken down by geographic location. This document complements the data set with information on funding streams, revenue, and program descriptions.

Please note that some data in the set cannot be assigned to a particular location, such as the small business tax cut or administrative costs to deliver programs or costs attributed to developing and implementing legislation.

Funding Streams

The CLP comprises revenue from two streams: the carbon levy and the Climate Change and Emissions Management Fund (CCEMF). The carbon levy stream deals with revenue from households and businesses, while CCEMF deals with revenue from large final emitters (facilities that produce a large amount of direct greenhouse gas emissions). Both streams represent the Alberta government's economy-wide price on carbon, and money collected under the CLP is invested in rebates to help Albertans adjust to carbon pricing, policies and programs related to energy efficiency, greenhouse gas emissions reductions and other climate leadership initiatives.

Revenue

Please note that actual program expenditures in this data set may not perfectly equal revenues received under the CLP, as it is not possible to exactly match revenue and spending within a fiscal year (e.g. why budget surpluses and deficits occur). In programs where uptake may be less or more than anticipated,

there may be savings found through efficiencies, or some funds may carry over to future years.

Lastly, due to the difference in ministry reporting and implementation timelines of CLP programs, data is included only for some projects delivered or approved for delivery in fiscal year 18/19. Some programs (e.g. Emissions Reduction Alberta) are delivered by separate entities that do not spend CLP funding provided to them within the same fiscal year, and as non-consolidated entities, carry funds from year to year.

Programs by Ministry

The following descriptions elaborate on programs found in the data set. Please note that outside of the approximately 40 programs and/or grants supported by the CLP, there will be additional initiatives found in the data set that are independent of a program or grant. This includes items like feasibility studies, the Lethbridge Farm Stewardship Centre solar project, or support for the International Panel on Climate Change (IPCC) Conference in Edmonton in 2018

Alberta Agriculture and Forestry

Agricultural Societies Energy Efficiency Program:

Funding over four years to help farmers, ranchers and agri-businesses improve energy efficiency for their operations.

Energy Savings for Agri-Processors (Small):

Shares the costs of investments that improve energy efficiency in agri-processing facilities to make agri-processors more aware of energy use and how to improve their bottom line.

Energy Savings for Agri-Processors (Large):

Targets the agri-processing sector (large agri-businesses) and provides funding for custom projects that

support transformational investments in energy efficiency technology and systems.

Farm Energy Program (Growing Forward): A federal-provincial-territorial partnership with a mandate to drive an innovative, competitive and profitable Canadian agriculture and agri-food sector.

Greenhouse Natural Gas Rebate Program: Provides eligible greenhouse operators with a grant equal to 80 per cent of the carbon levy they pay on crop production-related heating.

Irrigation Efficiency Program: Helps producers invest in new or upgraded low-pressure irrigation equipment, improving water efficiency and reducing energy use.

Micro Combined Heat and Power for Dairies: Cogeneration units for dairy farms.

On-Farm Solar Photovoltaics Program: Assists producers with the purchase of grid-connected solar panel systems that can be used to generate electricity and reduce emissions on farms.

On-Farm Energy Management Program: Assists with the purchase of equipment that improves energy efficiency or monitors energy consumption. This includes lighting, pumps, meters, boilers, heaters and low-energy, livestock-watering fountains.

Alberta Economic Development and Trade

Capital Investment Tax Credit (CITC) – Clean Tech Stream: Tax credit to encourage manufacturing, processing and tourism infrastructure companies to make capital investment in Alberta. CLP investments include the Clean Technology Commercialization and Clean Technology Business Innovation streams.

Alberta Education

Solar Technology System (STS): Provides funding to build solar energy systems for new school projects to help reduce long-term electricity costs for school authorities and to help protect the environment. Installing solar panels also provides a direct opportunity to impact student learning, as discussion of this technology can be included in curriculum.

Alberta Environment and Parks

Bioenergy Producer Program and Extension:

Provides grants to support bioenergy production capacity to reduce emissions from the use of fossil fuel alternatives and create value-added opportunities with economic benefits. These include liquid biofuels like diesel, ethanol and pyrolysis oil; biogas electricity production from farm-based anaerobic digesters; and electricity produced from wood byproducts (biomass). In 2017, the scope was revised and program was extended to 2020.

Community Environment Action Grant: Helps Albertans to work together as stewards to take action on climate change. Projects must lead to reducing greenhouse gas emissions and demonstrating social benefits such as creating or supporting community- and partnership-building opportunities.

Energy Efficiency Alberta (EEA): The government established EEA in 2017 as part of the CLP. The agency promotes and supports energy efficiency and community energy systems for homes, businesses and communities.

EEA - Energy Audits: Conducted as part of the Home Energy Plan, an energy audit (also known as a home energy evaluation) is an energy evaluation to see which areas of the home can be upgraded to reach optimal energy performance.

EEA - Business, Non-Profit and Institutional Savings Program: The first iteration of this program exceeded expectations for both participation and energy savings. As a result, EEA made several changes to the program in July 2018 including required preapproval of projects, revised rebate values and program terms, and restrictions to post-installation applications. The program was renamed Business Energy Savings, and offers incentives to businesses, non-profits and institutional organizations to encourage them to choose high-efficiency products.

EEA - Education: Part of EEA's mandate is to raise awareness among energy consumers about energy use and the associated economic and environmental

consequences, and to promote the development of an energy efficiency services industry in Alberta.

EEA - Industrial Energy Efficiency (IEE) Program for Large Emitters: Known to the public as Custom Energy Solutions, this program helps facilities with high energy needs improve productivity, save energy and save money by upgrading inefficient equipment and making other energy improvements.

EEA - Methane Emissions Reduction: Helps oil and gas facilities identify, reduce, improve or eliminate methane waste through a collection of quick implementation measures and equipment upgrades.

EEA - Non-Profit Energy Efficiency Transition Program (NEET): Helping non-profit and volunteer organizations save money and energy by offering direct installations of energy-efficient products at no charge.

EEA - Residential and Commercial Solar: Provides financial incentives to Alberta homeowners, businesses, and non-profits who install solar photovoltaic systems on their homes, businesses, and facilities in the province.

Residential No-Charge Energy Savings: Launched in March 2017, this program offered direct, no-charge installation of energy efficient products in Albertans' houses, apartments and condos. The program is now fully subscribed and registration is closed. It surpassed all expectations for participation, energy savings and emissions reductions.

EEA - Residential Retail Products Program, Part 1: Offered point-of-sale rebates for items like programmable thermostats, water-saving devices, smart power strips and heavy-duty timers. The first campaign ran in April 2017.

EEA - Residential Retail Products Program, Part 2: This was the second offering of the retail campaign, which ran in April 2018. Instant savings were available in stores for programmable thermostats, low-flow showerheads, smart power bars, LED light fixtures and LED yard lights with motion sensors.

Emissions Reduction Alberta (ERA): Works with the Alberta government, industry and innovators to accelerate the development of innovative technologies that reduce emissions. Recent ERA programs funded by the CLP include:

- ERA - Industrial Efficiency Challenge: Designed to implement leading technologies in oil and gas, chemicals and fertilizers, cement and concrete, forestry and agriculture, and electricity and manufacturing.
- ERA - Biotechnology, Electricity and Sustainable Transportation (BEST) Challenge: Open to technology developers, industry, industrial associations and medium-sized enterprises, research and development organizations, post-secondary institutions, municipalities, not-for-profit organizations, and government research labs and individuals.

Municipal Climate Change Action Centre (MCCAC): Provides funding, technical assistance and education to help municipalities, schools, and non-profits address climate change by reducing emissions. The centre is a partnership between the Government of Alberta, the Alberta Urban Municipalities Association and Rural Municipalities of Alberta.

MCCAC - Alberta Municipal Solar Program: Provides financial rebates to municipalities that install grid-connected solar photovoltaic systems on municipally-owned facilities or land and complete public engagement for the project.

MCCAC - TAME+ and TAME Express: Provided rebates for a variety of efficient lighting measures, HVAC and water heating equipment. Following oversubscription of this program, EEA's Business Energy Savings Program provides similar supports.

Alberta Energy

AER (Alberta Energy Regulator) Methane Reduction: To help oil and gas producers reduce methane emissions (as targeted under the CLP), government has consulted extensively with industry, environmental groups, academia, and research and

technology organizations to develop draft methane directives.

Draft directives released by AER are designed to ensure actions are kept at the lowest cost to Alberta's energy sector by securing flexibility for companies to innovate and use technologies best suited to their operations through an outcome-based approach, with mandated check-in points to ensure targets are met.

Coal Phase-Out Agreements: Provided transition payments to ATCO, Capital Power and TransAlta for six coal-fired units that were expected to operate beyond 2030.

Regulated Rate Option: A four-year cap on power prices took effect on June 1, 2017. Until May 31, 2021, Albertans on the Regulated Rate Option electricity plan will pay the market rate or the government's cap rate – whichever is lower.

Alberta Health

LED Lighting for Health Facilities: Retrofits occurred at ten hospitals in four zones. Surplus funding will support LED lighting at two more sites.

Alberta Indigenous Relations

Indigenous Climate Leadership Initiative (ICLI): Seven funding programs that support Indigenous climate leadership.

ICLI - Climate Capacity: Builds capacity within communities and organizations to increase climate knowledge, helps communities prepare for green energy and economic development opportunities, and increases awareness of local actions to reduce emissions.

ICLI - Community Energy Audits: Provides tools and funding to help Indigenous communities and organizations understand how energy is used and identify savings opportunities.

ICLI - Community Planning: Supports Indigenous communities to establish an understanding of their energy conservation opportunities, set priorities to improve energy efficiency and reduce emissions, and pursue opportunities to help green Alberta's economy.

ICLI - Energy Efficiency Retrofits: Provides funding to improve the energy efficiency of Indigenous communities and new and existing Indigenous organization-owned buildings.

ICLI - Green Employment: Provides grant money to the Alberta Aboriginal Skills Employment and Training Strategy (ASETS) agreement holders, whose members will train Indigenous people for employment in the green economy.

ICLI - Green Energy Development: Supports the development of community owned, commercial or community scale, renewable-energy generation projects.

ICLI - Solar Program: Provides grants to Indigenous communities or Indigenous organizations to install solar photovoltaic systems on community or organization-owned facilities.

Off-Grid Communities Diesel Reduction: Athabasca Chipewyan First Nation, Mikisew Cree First Nation and Métis Local 125 came together to form Three Nations Energy LP which will develop, own and operate a solar array to generate electricity and reduce reliance on diesel.

Alberta Infrastructure

Lighting LED Upgrade: Retrofitting all provincial highway lighting in Alberta. The focus is currently on major urban roads like Southwest Anthony Henday Drive, Deerfoot Trail, Northwest Stoney Trail and Highways 1 and 3 in Medicine Hat.

Alberta Labour

Coal Workforce Transition Fund: Provides financial support for re-employment, retirement, relocation and education as workers affected by the end of coal-fired electricity generation prepare to start new jobs or retire.

Alberta Seniors and Housing

Affordable Housing: Offers direct, no-charge installation of low-cost energy efficiency products like Energy Star refrigerators, LED lights and high-efficiency showerheads for Alberta's affordable housing tenants. This program also includes energy

efficiency upgrades for common and exterior areas like hallways and parking lots.

Alberta Treasury Board and Finance

Lloydminster Competitive Adjustment Grant:

Provides eligible retail fuel dealers in the border city with a grant that covers the difference in total fuel tax and Alberta's carbon price and Saskatchewan to help ensure Alberta retailers do not lose business.

Alberta Transportation

Green Transit Incentives Program (GreenTRIP):

One-time capital funding to municipalities to support new and expanded public transit. Program criteria was expanded in July 2016 to allow municipalities to apply for funding a broader range of transit projects.